## SPECIFICATIONS

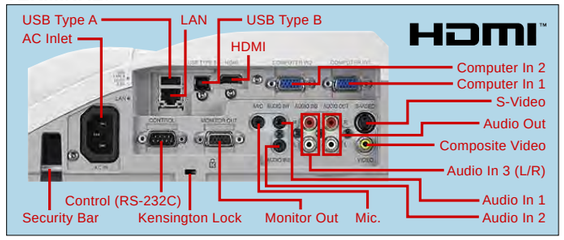
| | | |
|---|---|---|
| Model name | | iPJ-AW250N/iPJ-AW250NM |
| Liquid crystal panel | | 0.59 type (inch), 1.5cm polysilicon active-matrix TFT x 3 |
| Number of pixels | | 1,024,000 pixels (H1280 x V800) |
| Resolution | | 1280 x 800 color pixels (WXGA) |
| Digital zoom | | x1.35 |
| Lamp | | 210W UHP |
| Light output (brightness) | | 2,500 Lumens |
| Contrast ratio | | 2,000:1 (Presentation mode) |
| Audio | | 10W |
| Keystone correction | | Manual Horizontal/Vertical Keystone |
| Power supply | | AC100-120V/AC220-240V |
| Operating temperature | | 5-35°C (41-95°F) |
| Input signals | Computer input | VGA, SVGA, XGA, WXGA, WXGA+, SXGA, WSXGA+, UXGA, MAC16" |
| | Video input | NTSC, NTSC4.43, PAL, SECAM, PAL-M, PAL-N, PAL (60Hz) 480i@60, 480p@60, 576i@50, 576p@50, 720p@50/60, 1080i@50/60, 1080p@50/60 |
| Input/output terminals | Video input | S-Video: Mini Din 4-pin x 1, Composite video: RCA jack x 1 Component video: via Mini-Dsub x 2 |
| | Audio input | Stereo Mini jack x 2, RCA jack x 2 (L/R) |
| | Computer input | Analog RGB: 15-pin Mini-Dsub x 2 |
| | HDMI input | HDMI x 1 (HDCP compliant) |
| | Audio output | RCA jack x 2 (L/R) |
| | Monitor output | Analog RGB: 15-pin Mini-Dsub x 1 |
| | USB | USB type A x 1 (for PC-less presentation), USB type B x 1 (for USB display or USB mouse control, and interactive function) |
| | Control | 9-pin Dsub x 1 for RS232C |
| | Wired network (LAN) | RJ-45 x 1 |
| | Mic. input | Mono Mini jack x 1 (compatible with dynamic microphones and unbalanced signal lines) |
| Agency certifications | | UL/cUL (US model only), FCC Part15 class A, AS/NZS CISPR22 class A, CE, RoHS, GOST-R |
| Dimensions (WxHxD) | | 345 x 102 x 303mm (13.6" x 4.0" x 11.9") [excluding protruding part, when mirror is closed.] |
| Weight | | Approximately 4.1kg (9.1 lbs.) |
| Standard accessories | | Remote control (Part#: HL02772) with two AA batteries, Power cord, Computer cable, USB cable, Interactive Pen and two AAA batteries, Cable cover, User's manuals, Security label, Application CD (network software), Application DVD (StarBoard Software), Wall mount unit and user's manual*, Sensor cover |
| Optional accessories | | Lamp: DT01181, Filter set: UX37191, Laser remote control: HL02651 (RC-R008) |

**Cable cover**

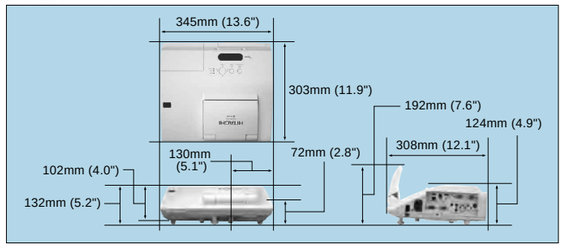
**Wall mount unit (HAS-K250)***

*Optional with iPJ-AW250N.

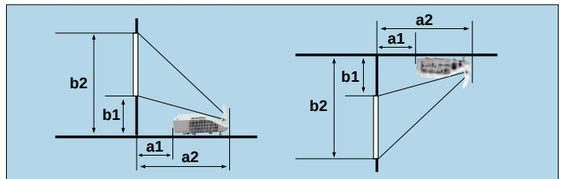
## TERMINALS




## DIMENSIONS




## PROJECTION DISTANCE




| **Screen Size** (16:10 Screen) | a1 | a2 | b1 | b2 |
|---|---|---|---|---|
| 60 type (inch), 1.5m | 0.120m (4.7") | 0.426m (16.8") | 0.295m (11.6") | 1.102m (43.4") |
| 70 type (inch), 1.8m | 0.188m (7.4") | 0.494m (19.5") | 0.332m (13.1") | 1.274m (50.2") |
| 80 type (inch), 2.0m | 0.256m (10.1") | 0.562m (22.1") | 0.369m (14.5") | 1.446m (56.9") |
| 90 type (inch), 2.3m | 0.324m (12.8") | 0.631m (24.8") | 0.407m (16.0") | 1.618m (63.7") |
| 100 type (inch), 2.5m | 0.392m (15.4") | 0.699m (27.5") | 0.444m (17.5") | 1.791m (70.5") |

- Manufacturer's recommended size is 60 type (inch), 1.5m – 100 type (inch), 2.5m.
- Tolerance ±8% (for projection distance a)
- Final specifications may vary slightly.

## Consideration for the Environment

### ■ Compliance with EU Directive RoHS*1

*1 RoHS is the acronym of "DIRECTIVE 2002/95/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment".

### ■ Reduction of resin usage in production

Use of hot runners in molds for making upper housing in order to reduce mill ends.

### ■ Reduction of $CO_2$ emissions

Carton volume has been cut down to 60%*2, reducing $CO_2$ emissions during transport.

*2 Compared to Hitachi CP-A100 ultra-short throw projector on the basis of one carton box.

### ■ Power saving mode engaged during standby

### ■ ECO mode

ECO mode provides power saving.

- Design and specifications are subject to change without notice.
- The projected images and comparison photos in this catalog are simulations.
- LCD panels, polarizers and other optical components and cooling fans may need replacement after prolonged usage. For more details, please consult a Hitachi sales representative.
- Do not use in places where there is a lot of water, dampness, steam, dust, soot or tobacco smoke. This may result in fire or malfunction.
- Optical components (lamp, LCD panel, polarizing plate, PBS [polarizer beam splitter]) have limited service lives. They must be repaired or replaced if they are used for a long period of time.
- These projectors use a mercury lamp with high internal pressure. Because of its properties, this lamp may burst with a loud noise or burn out if struck or after it has been used for a period of time. The time until it bursts or burns out varies greatly according to differences between lamps and usage conditions. Turning the lamp's power on and off frequently shortens its service life.
- Optical components other than the lamp: If the projector is used for six hours or more per day, they may need to be replaced in less than a year.
- LCD panel: If the projector is used continuously for six hours or more, its replacement cycle may be shortened.
- Do not turn projector on again for ten minutes after shutdown. Neglect can shorten the lifetime of the lamp. During use and immediately after use, do not touch anywhere near the lamp and the vents as these parts are extremely hot.
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**Remote control warning:** Do not look into the laser beam. Class 2 Laser product; maximum output 1mW; wavelength 650nm.

HITACHI


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Ultimate Interactive Short Throw LCD Projectors

# iPJ-AW250N/iPJ-AW250NM

HITACHI
Inspire the Next

StarBoard Software [minutes]
File Edit View Tools Insert Topic Conference Settings Help
MENU
The wall becomes an interactive space!

## ULTIMATE 究極 SHORT THROW

### Ultimate Interactive Projectors with Short Throw

- Wall mount unit: included with iPJ-AW250NM, optional with iPJ-AW250N.

# Projectors that previously only projected images now have interactive functions that surpass conventional uses

**The iPJ-AW250N/iPJ-AW250NM projectors come with Starboard® Software that allows interactive operation. Until now you could only look at the image from the projector.**

**Now you can use the supplied interactive pen to perform mouse operations or to write letters or draw figures on the projected image using the StarBoard Software.**

**Interactivity provides several benefits:**
- **Real time operation and revision**
- **Improved audience concentration**
- **Audience participation in image operations**
- **Prompt data saving and printing function of the displayed content**

**These advanced projectors also feature Ultimate Short Throw and network functions.**

## Meeting room walls become interactive spaces.

**With these projectors, as in the past you can write comments on a separate whiteboard while projecting images for effective meetings, and furthermore you can also write directly over the projected image on a wall using the StarBoard Software. What's more, the interactive function works on many types of surfaces: flat walls, whiteboards and even chalkboards.**



## Excellent Interactive Functions for Business Use*

*All interactive functions require StarBoard Software.

### ■ Write Directly with the StarBoard Software

You can write letters or draw shapes directly on the image with the interactive pen using the StarBoard Software and of course use it to erase what you have added. You can erase or change pen color or thickness from the floating tool bar.

### ● Interactive Pen

The interactive pen lets you select three mode variations. The Normal pen mode is best for annotations and freehand, Intelli-pen mode is best for writing notes and drawing shapes, and Pointer pen mode works like a laser pointer.

### ■ Operating a Mouse with the StarBoard Software

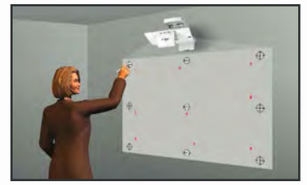
Using the supplied interactive pen as a mouse lets you perform computer operations on the projected image using the StarBoard Software.

### ■ Save Handwritten Data

You can save what you have written or drawn on the image using the StarBoard Software in PNG, JPEG, BMP, HTML or PDF formats. This is handy for retaining meeting notes, and for sharing them via email or printing them out.

### ■ Simple Calibration

Initial setup is faster and easier, because you can perform calibration just by touching nine locations with the supplied interactive pen.



### ■ You can use Microsoft® Word, Microsoft Excel® and Microsoft PowerPoint® with the StarBoard Software and Interactive Pen

### ■ Conference Mode

You can share the StarBoard Software whiteboard with people in remote locations.

## ULTIMATE 究極 SHORT THROW

**Ultimate Interactive Short Throw LCD Projectors**

# iPJ-AW250N/iPJ-AW250NM

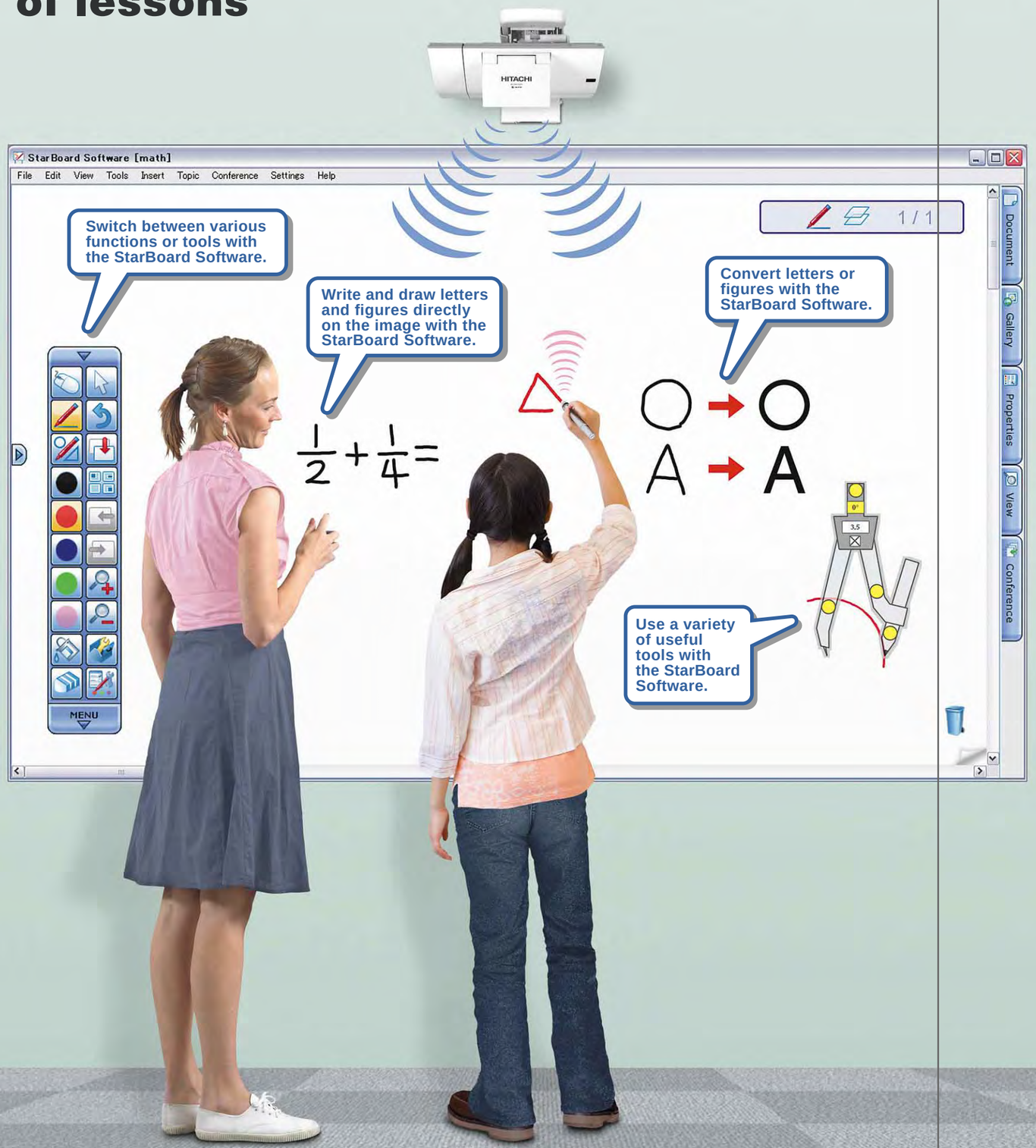
**WXGA 2,500 Lumens**

- Wall mount unit: included with iPJ-AW250NM, optional with iPJ-AW250N.

## StarBoard® Software Included.

- StarBoard® is a registered trademark of Hitachi Solutions, Ltd. in Japan and other countries.

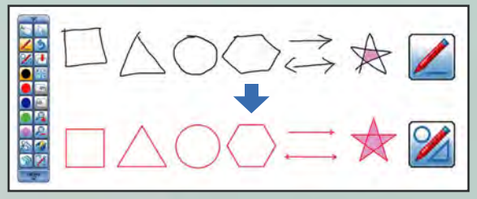
# The handy interactive functions allow greater communication for a new style of lessons


StarBoard Software [math]
File Edit View Tools Insert Topic Conference Settings Help
1 / 1
Switch between various functions or tools with the StarBoard Software.
Write and draw letters and figures directly on the image with the StarBoard Software.
Convert letters or figures with the StarBoard Software.
Use a variety of useful tools with the StarBoard Software.
MENU
Document
Gallery
Properties
View
Conference

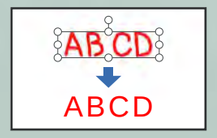
## Useful Interactive Functions for Education Use*

*All interactive functions require StarBoard Software.

### ■ Neatly Convert Letters or Figures with the StarBoard Software

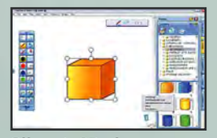


You can automatically convert freehand shapes into geometric objects and handwriting into text on the projected image using the StarBoard Software. These operations are easily accomplished with the interactive pen.



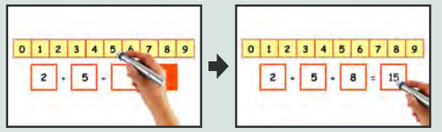

### ■ Clip Art, Adobe® Flash® Learning Objects

The StarBoard Software includes clip art. You can drag 3D shapes and other images onto the page and then move, resize and rotate them. There are many interactive Adobe Flash files, which are useful for lessons. Math and science are already included in Clip Art.



**Clip art: 3D shapes**

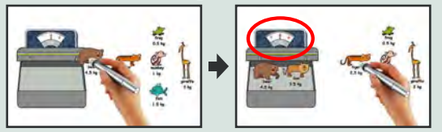
**Adobe Flash file: adding 1 digit numbers**



Select a number and drag it into the box.

Click the pen on the answer box and the answer appears.

**Adobe Flash file: adding decimal masses**



Drag the animals onto the scale.

As each animal is added, the numbers on the scale change.

### ■ Subject Toolbox

There are four subject toolboxes: Geography, Language Arts, Math and Science. You can choose one from the toolbar for display on the screen, and use the various tools to hold the students' attention and improve their comprehension of the subject.

**Language Arts: Anagrams**

Have a student drag the random letters into the correct order.

You can give a hint, and when the word is correct, the word Correct! appears.

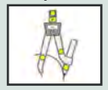
**Science**

**Math**

### ■ Select a Variety of Useful Tools

The interactive pen lets you operate a compass, ruler, protractor, stopwatch and other useful tools on the projected image using the StarBoard Software, making lessons even easier to understand.

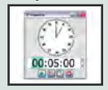
**Compass**



**Ruler**

**Protractor**

**Stopwatch**




### ■ Screen Capture

In addition to Full Screen capture, you can also select Partial and Freehand capture.

**Full Screen**

**Partial Selection**

**Freehand Selection**

### ■ StarBoard Software 9.2 Requirement Specification

**CPU:** Intel® Pentium® 4 1.8GHz or faster
**Free Hard Drive Space:** 600 MB or more
**RAM:** 1GB or more
**Display Colors:** High Color (16 bit) or higher
**Operating System (OS):** Windows® XP 32bit/Windows Vista® 32bit/Windows 7 32/64bit (the latest service pack must be applied) (Tablet PC Edition and Server Edition are not supported)
**Software Required:** Internet Explorer® 6.0/7.0/8.0 (for viewing Online Help and using Internet search functions) PowerPoint 2002/2003/2007/2010 (for viewing PowerPoint documents) Microsoft DirectX® 9.0c/Windows Media® Player 9 or above (for using movie features) Adobe Flash Player 10 (for using Flash object)
**Others:** DVD drive; Video card with hardware overlay feature (for using movie features) (for Webcam playback and capturing feature); DV (Digital video, DV cameras, D-VHS, etc.); Capture devices which support DirectShow (with WDM drivers)

**For Conference host feature**
**CPU:** Intel® Core™ 2 Duo 2.0GHz or faster
**Free Hard Drive Space:** 2GB or more
**RAM:** 2GB or more
**Others:** TCP/IP 54Mbps or above

### ■ Recommended for efficient use of the iPJ-AW250N/ iPJ-AW250NM interactive functions

**CPU:** Intel Core 2 Duo 2.0MHz x 2 or faster
**Memory:** 1GB or more (Windows Vista or Windows 7: 2GB or more
**Free Hard Drive Space:** 600MB or more
**Display Colors:** High Color (16bit) or higher
**Web Browser:** Internet Explorer 6/7/8
**Others:** For movie playback, hardware overlay is necessary for the video card. For web camera playback and capture, a DV capture device (digital video, DVD camera, etc.) that supports DirectShow with WDM device is necessary.

• Actual operating environment depends on the computer.

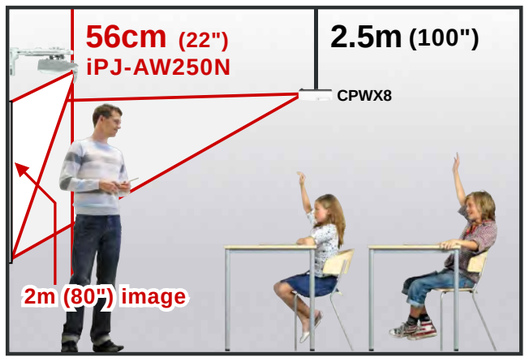
# Their wide range of functions makes these projectors extremely practical for many applications

## Ultimate Short Throw

**These mirror projection type projectors feature Ultimate Short Throw, for projecting a 2m (80 inches) image from only 56cm (22 inches) onto a wall or whiteboard. They can project large images even in classrooms and small meeting rooms with limited space. With a large image, the audience will pay closer attention to the lesson or presentation.**

### ■ Reduced Glare and Shadows

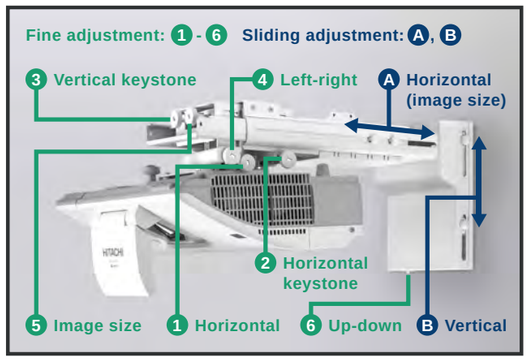
Ultimate Short Throw greatly reduces glare from the projector's light source, making it easier for the teacher or presenter to see the audience. The audience also has a clearer view because the teacher's or presenter's hands and body shadows are minimized. The result is a better classroom or meeting room experience for both teachers or presenters and audience.




### ■ Precision control wall mount unit*.

The six-axis wall mount design ensures that the projector can be installed in exactly the right position. The entire unit slides horizontally and vertically, and fine adjustments can be made to each axis independently.

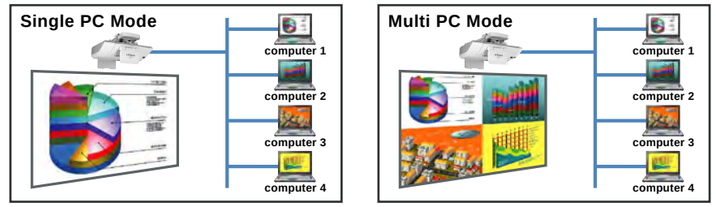
* Included with iPJ-AW250NM, optional with iPJ-AW250N.
Do not attempt to install the projector yourself.
Have your dealer or service center handle all installation work.




## Advanced Network Functions

### ■ Network Presentations

You can project still or moving images from one or more networked computers. The Single PC mode lets you select one computer on the network, while the Multi PC mode lets you use up to four computers. Displaying various images from computers makes lessons and presentations much more effective.




### ■ Messenger

The Messenger function transmits text data to the projector via a network, so the projector can display it. This is an easy and efficient way to send campus-wide announcements.

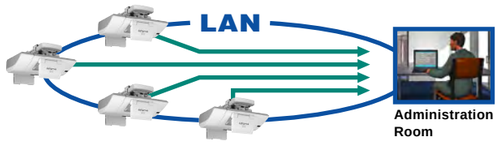
**Messenger is ideal for:**

- Campus Notifications • School Activities • Daily Schedules
- Community/Local News

- This function is not intended or guaranteed for the distribution of warning messages created by security systems.

### ■ Centralized Reporting

With just one PC in an administration room, you can collect reports from all projectors connected to the network.




## Superior Convenient Features

### ■ WXGA (1280 x 800) and 720p Capability

Featuring WXGA (1280 x 800) resolution, these projectors are capable of displaying wide and large images.

### ■ Approximately 4.1kg (9.1 lbs.) Light Weight

Even with their many functions, these projectors are light, with a weight of only 4.1kg (9.1 lbs).

### ■ 5m USB Cable

The supplied USB cable is 5m long, expanding the area where the projector can be placed.

### ■ Perfect Fit

Perfect Fit enables quick adjustment of the projected image by moving its four corners one at a time. In addition, barrel or pincushion distortion, which occur on rounded surfaces, can easily be corrected.

### ■ 10W Internal Speaker

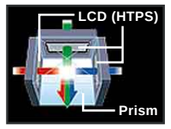
The projectors have a built-in 10W high power speaker.

### ■ HDMI Input

With signals transferred completely in the digital domain, lessons and presentations are assured of the highest image quality.

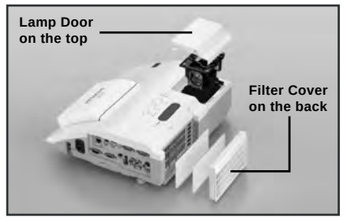
### ■ Inorganic LCD Panels

These projectors use three inorganic LCD panels, which feature higher resistance to light and offer high reliability. The use of double speed drive further improves picture quality.




### ■ Easy Maintenance

The lamp door is on the top and the filter cover on the back, so maintenance and replacement of these parts can be done easily.




### ■ Hybrid Filter

The Hybrid Filter has an electrostatic design with hybrid protection filter layers, protecting the optics from dust, dirt and chalk particles. It also has a longer life than previous filters, so the projector requires less frequent maintenance.

### ■ Versatile Security Functions

The projectors are equipped with a security bar, PIN Lock, MyScreen Lock and Transition Detector functions.

### ■ More Convenient Features

• 2,000 : 1 High Contrast Ratio (Presentation Mode) • Low Noise of 28dB*1 (ECO Mode)
• Display via USB • Audio Pass Through*2
• Power Saving Mode • Template Function*3
• Daytime Mode • My Button • My Memory
• Input Source Naming • 4-Second Quick Start • Direct Power On/Off • Closed Caption
• Compatible with AMX Device Discovery

*1 Typical. Tested in 23°C environmental conditions.
*2 When in Normal mode at standby setting. It does not function in Saving mode.
*3 Patent pending